Claims:

1. An attenuated strain of a prokaryotic microorganism transformed with nucleic acid encoding papillomavirus virus major capsid protein wherein the protein assembles in the microorganism to form virus like particles (VLPs).

2. The attenuated microorganism strain of claim 1 which is an attenuated strain of *Salmonella*.

3. The attenuated microorganism strain of Claim 2 wherein the *Salmonella* strain is *Salmonella typhimurium, Salmonella typhi, Salmonella dublin,* or *Salmonella enteretidis.*

4. The attentuated microorganism strain of Claim 1 which is an attenuated strain of *Escherichia coli, Shigella, Yersinia, Lactobacillus, Mycobacteria* or *Listeria.*

5. The attenuated microorganism strain of Claim 1 wherein the nucleic acid encodes a human papillomavirus virus major capsid protein.

6. The attenuated microorganism strain of Claim 1 wherein the HPV strain is HPV16, 18, 31, 45 or 56.

7. The attenuated microorganism strain of Claim 1 wherein the papillomavirus virus major capsid protein is L1 protein.

8. The attenuated microorganism strain of Claim 1 wherein the papillomavirus virus major capsid protein is expressed as a chimera with a fusion partner.

9. The attenuated microorganism strain of Claim 8, wherein the papillomavirus major capsid protein is coexpressed with L2 protein, the L2 protein being fused to the fusion partner.

10. The attenuated microorganism strain of Claim 8 wherein the fusion partner is E6, E7 or E2 HPV protein, an immunogenic protein from a non-HPV pathogen or a tumour specific antigen.

11. The attenuated microorganism strain of Claim 1 wherein the microorganism is transformed with nucleic acid encoding two or more papillomavirus virus major capsid proteins.

12. A composition comprising one or more of the attenuated microorganisms of Claim 1, in combination with a physiologically acceptable carrier.

13. A vaccine comprising one or more of the attenuated microorganisms of Claims 1, in combination with a physiologically acceptable carrier.

14. The vaccine of Claim 13 formulated for mucosal immunization.

15. The vaccine of Claim 14 wherein the mucosla immunization is via oral, rectal, nasal, or genital routes.

16. The vaccine of Claim 13 wherein the vaccine provides protection against papillomavirus infection or cancer of the anogenital tract.

17. A method for producing assembled papillomavirus virus like particles comprising culturing an attenuated microorganism strain of Claim 1 and recovering the assembled virus like particles thus produced.

18. A method of detecting the presence of anti-papillomavirus antibodies in a sample from a subject, the method comprising immobilizing the HPV VLPs on a solid support, exposing the support to the sample and detecting the antibodies binding to the immobilized HPV VLPs, wherein the HPV VLPs are produced by an attenuated microorganism strain of Claim 1 .

19. A method of treating a patient in need of prophylaxis or therapy of a papillomavirus infection or papillomavirus associated cancer of the anogenital tract comprising administering to that patient a prophylactically or therapeutically effcetive amount of an attenuated microorganism as claimed in Claim 1